

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

File application of:

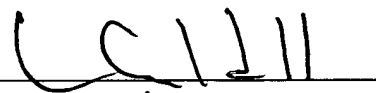
John G. DeSteele and Larry C. Olsen

Application No. 10/727,062**Filed:** December 2, 2003**Confirmation No.** 4870**For:** THERMOELECTRIC POWER SOURCE
UTILIZING AMBIENT ENERGY
HARVESTING FOR REMOTE SENSING
AND TRANSMITTING**Examiner:** Alan D. Diamond**Art Unit:** 1753**Attorney Reference No.** 23-69853-01**CERTIFICATE OF MAILING**

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450 on the date shown below.

Attorney or Agent
for Applicant(s)

Date Mailed


5/28/05**INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 C.F.R. § 1.97(b)(3)**

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Listed on the accompanying form PTO-1449 and enclosed herewith are several English-language documents. Applicants respectfully request that these documents be listed as references cited on the issued patent.

Copies of United States patents and United States published patent applications do not have to be provided to the Patent Office (37 C.F.R. 1.98(a)(2)(ii)). Copies of unpublished U.S. applications do not have to be provided, as long as the application is available on PAIR, as this requirement of 37 C.F.R. § 1.98(a)(2)(iii) has been waived by the United States Patent and Trademark Office pursuant to the Official Gazette Notice on October 19, 2004 (1287 OG 163). Applicants will provide copies of such patents or applications upon request. Copies of the cited non-patent, non-application documents are enclosed.


Applicants filed this Information Disclosure Statement ("IDS") before the mailing date of a first Office action on the merits. As a result, no fee should be required to file this IDS. However, if the Patent Office determines that a fee is required for Applicants to file this IDS,

please charge any such fees, or credit overpayment, to Deposit Account No. 02-4550. A **duplicate** copy of this Information Disclosure Statement is enclosed.

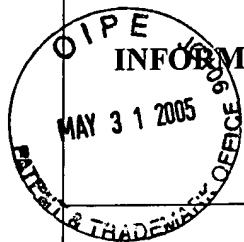
The filing of this IDS shall not be construed to be an admission that the information cited in the statement is, or is considered to be, prior art or otherwise material to patentability as defined in 37 C.F.R. §1.56.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

By 
Lisa M. Caldwell
Registration No. 41,653

One World Trade Center, Suite 1600
121 S.W. Salmon Street
Portland, Oregon 97204
Telephone: (503) 226-7391
Facsimile: (503) 228-9446
cc: Docketing



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Attorney Docket Number	23-69853-01
Application Number	10/727,062
Filing Date	December 2, 2003
First Named Inventor	John G. DeSteele
Art Unit	3744
Examiner Name	Not yet assigned

U.S. PATENT DOCUMENTS

Copies of U.S. Patent documents do not need to be provided, unless requested by the Patent and Trademark Office. For patents, provide the patent number and the issue date. For published U.S. applications, provide the publication number and the publication date. For unpublished pending patent applications, provide the application number and the filing date.

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
		6,096,964	8/2000	Ghamaty et al.
		6,096,965	8/2000	Ghamaty et al.
		6,288,321	9/2001	Fleurial et al.
		6,372,538	4/2002	Wendt et al.
		6,388,185	5/2002	Fleurial et al.
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FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Country	Number	Publication Date	Name of Applicant or Patentee

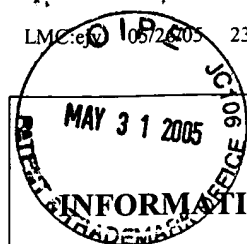
OTHER DOCUMENTS

Examiner's Initials*	Cite No. (optional)	
		Stölzer, M. et al., "Preparation of Highly Effective p-Bi _{2.5} Sb _{1.5} Te ₃ and n-Bi ₂ Te _{2.7} Se _{0.3} Films," 15 th International Conference on Thermoelectrics, pp. 445-449 (1996).
		Stordeur, Matthias et al., "Low Power Thermoelectric Generator - self-sufficient energy supply for micro systems," 16 th International Conference on Thermoelectrics, pp. 575-577 (1997).
		Stark, Ingo et al., "New Micro Thermoelectric Devices Based on Bismuth Telluride-Type Thin Solid Films," 18 th International Conference on Thermoelectrics, pp. 465-472 (1999).

EXAMINER
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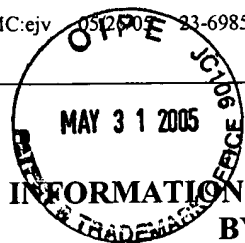
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		Stölzer, M. et al., "Optimisation of p - (Bi _{0.25} Sb _{0.75}) ₂ Te ₃ and n - Bi ₂ (Te _{0.9} Se _{0.1}) ₃ Films for Thermoelectric Thin Film Components," 5 pages.	
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		Vining, Cronin B., "Semiconductors are cool," <i>Nature</i> , Vol. 413, pp. 577-578 (October 11, 2001).	
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		Chen, G., "Thermal conductivity and ballistic-phonon transport in the cross-plane direction of superlattices," <i>Phys. Rev. B</i> , Vol. 57, No. 23, pp. 14958-14973 (June 15, 1998).	
		Hicks, L.D. et al., "Effect of quantum-well structures on the thermoelectric figure of merit," <i>Phys. Rev. B</i> , Vol. 47, No. 19, pp. 12727-12731 (May 15, 1993).	
		Kiely, J.H. et al., "Characteristics of Bi _{0.5} Sb _{1.5} Te ₃ /Be ₂ Te _{2.4} Se _{0.6} thin-film thermoelectric devices for power generation," <i>Meas. Sci. Technol.</i> , Vol. 8, pp. 661-665 (June 1997).	
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		Tritt, T., "Recent Trends in Thermoelectric Materials Research III," Academic Press, London, Vol. 7, pp. 50-55 (2001).	
		Schaevitz, Samuel B. et al., "A Combustion-Based MEMS Thermoelectric Power Generator," The 11 th International Conference on Solid-State Sensors and Actuators, Munich, Germany, 4 pages (June 10-14, 2001).	
		21 st International Conference on Thermoelectrics, Jet Propulsion Laboratory, California Institute of Technology, Massachusetts Institute of Technology; "Texture formation in extruded rods of (Bi,SB) ₂ (Te,Se) ₃ thermoelectric alloys," Vasilevskiy, E. et al. (August 26-29, 2002).	
		Thin-film Superlattice Thermoelectric Technology, www.rti.org , 4 pages (2002).	
		Physics of Thin Films: Sputter Deposition (Ohring: Chapter 3, sections 5-6), www.uccs.edu/~tchrste/courses/PHYS549/549lectures/sputter.html , 4 pages (Printed 11/21/02).	
		Physics of Thin Films: Sputter Deposition Techniques (Ohring: Chapter 3, section 7), www.uccs.edu/~tchrste/courses/PHYS549/549lectures/sputtertech.html , 5 pages (Printed 11/21/02).	

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		Venkatasubramanian, R., "Thin-film Superlattice Thermoelectric Devices for Power Conversion and Cooling," www.its.org/its/ict2002/Abstracts/Rama_Venkatasubramanian.htm (Printed 9/26/03).	
		D.T.S. GmbH: Thin Film Thermoelectric Generators, D.T.S., www.dts-generator.com/index.htm (Printed 5/4/04).	
		D.T.S. GmbH: Thin Film Thermoelectric Generators, Low Power Thermoelectric Generators; www.dts-generator.com/gen.txex.htm (Printed 5/4/04).	
		D.T.S. GmbH: Thin Film Thermoelectric Generators, Infrared-Sensors, www.dts-generator.com/sen-txe.htm (Printed 5/4/04).	
		D.T.S. GmbH: Thin Film Thermoelectric Generators, Research and development, www.dts-generator.com/dev-txe.htm (Printed 5/4/04).	

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